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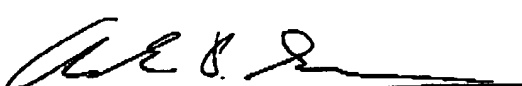
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| PRE-APPEAL BRIEF REQUEST FOR REVIEW | | Docket Number (Optional) | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------|
| | | 1280-SC12966ZC | |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>September 18, 2006</u> Signature <u>Molly K. Harrison</u> Typed or printed name <u>Molly K. Harrison</u> | | Application Number <u>10/731,069</u> | Filed <u>December 9, 2003</u> |
| | | First Named Inventor <u>Pravinkumar PREMAKANTHAN et al.</u> | |
| | | Art Unit <u>2618</u> | Examiner <u>Michael CHU</u> |
| Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. | | | |
| This request is being filed with a notice of appeal. | | | |
| The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. | | | |
| I am the | |  | |
| <input type="checkbox"/> | applicant/inventor. | Signature | |
| <input type="checkbox"/> | assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) | Adam D. Sheehan Typed or printed name | |
| <input checked="" type="checkbox"/> | attorney or agent of record. Registration number <u>42,146</u> | <u>512-439-7100</u> Telephone number | |
| <input type="checkbox"/> | attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____ | <u>September 18, 2006</u> Date | |
| NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*. | | | |
| <input type="checkbox"/> | *Total of _____ forms are submitted. | | |

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Pravinkumar PREMAKANTHAN, et al.

Title: ADAPTIVE TRANSMIT POWER CONTROL SYSTEM

App. No.: 10/731,069

Filed: December 9, 2003

Examiner: Michael CHU

Group Art Unit: 2618

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REMARKS IN SUPPORT OF
THE PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

In response to the Final Office Action mailed May 17, 2006 (hereinafter, "the Final Action") and the Advisory Action mailed July 3, 2006 (hereinafter, "the Advisory Action"), and pursuant to the Notice of Appeal and Pre-Appeal Brief Request for Review submitted herewith, the Applicants request review of the following issues on appeal.

The cited art fails to disclose the recited elements of "an adaptive filter coefficients calculation unit" and "an adaptive filter having multiple taps coupled to the adaptive filter coefficients calculation unit"

The Final Action rejects claim 7 under 35 U.S.C. § 102(e) as being anticipated by Epperson et al. (U.S. Publication No. 2003/0040343). Claim 7, which depends from independent claim 1, recites "an adaptive filter coefficients calculation unit" and "an adaptive filter having multiple taps coupled to the adaptive filter coefficients calculation unit." These elements are not disclosed by Epperson. Epperson discloses a system for controlling the output of a power amplifier by adjusting the power supply level of the amplifier. *Epperson*, [002]. The Epperson system does not include an adaptive filter coefficients calculation unit.

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According to the Final Action at page 8, Epperson discloses an adaptive filter coefficients calculation unit at paragraph [0028], lines 11-18, which reads:

A filter circuit 38 minimizes broadband interference in the received signal, while a downconverter 40 down converts the filtered, received signal to an intermediate or baseband frequency signal, which is then digitized into one or more digital streams. The receiver front end 22 typically uses one or more mixing frequencies generated by the frequency synthesizer 34.

The Final Action also cites paragraph [0044] of Epperson as disclosing an adaptive filter coefficients calculation unit. That paragraph reads as follows:

Talk time and power management are key concerns in transmitter design, since power amplifiers account for the highest current draw in a mobile radiotelephone. Considering only the power amplifier's efficiency does not provide a true assessment of total system efficiency. Effective efficiency must be considered. Effective efficiency factors in the loss between the power amplifier and antenna, and is a much better figure of merit for evaluating power management and talk time.

Applicants respectfully submit that neither of the cited passages, nor any other portion of Epperson, discloses a unit that calculates adaptive filter coefficients. Instead, the cited passages simply indicate that the Epperson system employs a filter to minimize broadband interference, and that power efficiency is a factor in power amplifier performance. There is no disclosure in Epperson that the filter circuit 38, nor any other portion of the Epperson system, is an adaptive filter coefficients calculation unit as recited in claim 7.

In addition, claim 7 recites an adaptive filter having multiple taps. As discussed above, Epperson discloses a filter 38 to minimize broadband interference. *Epperson*, [0028]. Epperson does not disclose that the filter 38 is an adaptive filter, or that the filter 38 has multiple taps. In fact, Epperson nowhere refers to filter taps, or to any adaptive filter. Accordingly, Epperson fails to disclose each and every element of claim 7.

With respect to claims 8-10 and 12-13, the claims depend from claim 7, and Epperson therefore fails to disclose each and every element of these claims, at least by virtue of their dependency on claim 7. In addition, these claims recite additional novel elements. For example, claim 8 recites "wherein the adaptive filter coefficients calculation unit utilizes a least mean square (LMS) adaptive algorithm." According to the Final Action at page 8, these elements are

not disclosed by Epperson, but are "inherent in the art." However, "[t]o establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robertson*, 169 F.3d 743, 745, (Fed. Cir. 1999) (citations omitted). Further, "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). Here, the Examiner has provided no basis for the assertion that it is inherent in the art for an adaptive filter coefficients calculation unit to employ a least mean square adaptive algorithm. Accordingly, the Final Action fails to show that Epperson discloses each and every element of claim 8.

With respect to claim 9, the claim recites "wherein the adaptive filter coefficient calculation unit utilizes a recursive least squares algorithm." The Final Action indicates at page 9 that these elements are "inherent in the art." However, the Examiner provides no evidence that the use of a recursive least squares algorithm necessarily flows from the teachings of Epperson. Accordingly, the Final Action fails to show that Epperson discloses each and every element of claim 9.

The cited art fails to disclose the recited elements of "dynamically adjusting multiple taps of an adaptive filter based on the error difference signal producing a control signal"

The Final Action rejects claim 17 under 35 U.S.C. § 102(e) as being anticipated by Epperson. Claim 17 recites dynamically adjusting multiple taps of an adaptive filter based on the error difference signal producing a control signal. These elements are not disclosed by Epperson. As explained above, while Epperson discloses a filter, Epperson does not disclose that the filter is an adaptive filter, nor does Epperson disclose that taps of the filter are adjusted based on an error difference signal. Accordingly, Epperson fails to disclose each and every element of claim 17.

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Claims 18-30 depend from claim 17. Accordingly, Epperson fails to disclose each and every element of these claims, at least by virtue of their dependence on claim 17. In addition, these claims recite additional novel elements. For example, claim 22 recites "wherein adjusting the multiple taps the adaptive filter is according to a least mean square (LMS) adaptive algorithm." According to the Final Action at page 8, these elements are "inherent in the art." However, as explained above, the Final Action provides no evidence that the recited elements necessarily follow from the teachings of Epperson. Accordingly, Epperson fails to disclose each and every element of claim 22.

With respect to claim 23, the claim recites "wherein adjusting the multiple taps of the adaptive filter is according to a recursive least squares algorithm." According to the Final Action at page 9, these elements are "inherent in the art." However, as explained above, the Final Action provides no evidence that the recited elements necessarily follow from the teachings of Epperson. Accordingly, Epperson fails to disclose each and every element of claim 23.

Conclusion

The Applicants respectfully submit that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Applicants believe no additional fees are due, but if the Commissioner believes additional fees are due, the Commissioner is hereby authorized to charge any fees, which may be required, or credit any overpayment, to Deposit Account Number 50-3797.

Respectfully submitted,



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9/18/06
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